

Economic Issues For Nebraskans



**Department of Agricultural Economics
University of Nebraska-Lincoln**

- In this issue:***
- ***Water rights showdown brewing***
 - ***Farm profitability project***
 - ***Urbanization pressures***

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in cooperation with the U.S. Department of Agriculture. Elbert Dickey, Dean and
Director of Cooperative Extension, University of Nebraska, Institute of Agriculture and Natural Resources.



From the department head's desk:

Our changing world

This issue of *Focus* is dedicated to Deb Rood who died on August 1, 2003, as a result of an auto accident caused by another vehicle. Deb's husband was driving their vehicle and was not seriously injured but their oldest daughter, Riley, received multiple injuries and is recovering at home. Deb was program coordinator for farm management extension programs and will be missed by many across Nebraska and the nation. She was one of the founders of the Women in Agriculture programs that are very active in Nebraska and have been emulated in many other states and even other parts of the world. Through these programs, Deb has helped many farm and ranch women become more involved in the management of the family business. Some have become the chief marketer and others the manager of the operation. As one of her supporters stated, she has developed a "safe environment" in which farm and ranch women can learn things they need to know about the farm and ranch operation. We will miss Deb and her upbeat outlook on life even when life was not always fair. The articles about Deb in this issue provide a glimpse of her contributions to our society.



The Department of Agricultural Economics is experiencing other changes. After four years of leadership from Dr. Jeff Royer, the department leadership is now in my hands as interim head for the next year. I look forward to this challenge. Many of you may not know me. I have been a department member since October 1985, but was located at the West Central Research and Extension Center in North Platte. I had been associate director of the center since late 1997, so I am familiar with the department and the administrative workings of UNL. A sign that hung in a now retired colleague's office at North Platte read, "Either lead or get out of the way!" I hope to do both. An academic department has many programs already ongoing and the last thing I want to do is get in their way. Yet any department needs leadership to help guide the overall direction of the ship. This ship is headed in the right direction. We must work together and make sure that continues.

We recently completed an Academic Program Review (APR). We have developed our response to the recommendations from the reviewers. In general, the APR was very supportive of the department and its current direction. As one would expect, there is room for improvement. The APR will help us become an even better and stronger department. We will provide a synopsis of some of the recommendations and how we intend to address them in the next issue of *Focus*.

In addition to the article celebrating the contributions of Deb Rood, this issue reflects the broad range of involvement of our faculty. They tackle subjects ranging from state issues such as water right conflicts to national issues such as country of origin labeling, and international studies about technology change in Sub-Saharan Africa. All of this research is important. It is useful for educating our students and ourselves about the world around us. The world has very limited boundaries due to the jet and electronic ages. If we Nebraskans are to participate in the world markets, it is important that we understand as much as possible about our own country and other parts of the world.

We have also added a new feature, "Focus on Alumni." This department has a large contingent of alumni who have had added immensely to our society. In this and future issues we will feature some of these people. We will undoubtedly miss some that we should feature so let us hear from you about those that we might otherwise miss.

We trust that you will enjoy reading this issue of *Focus*. If you have questions or comments, please feel free to contact any of the authors or me at (402) 472-3401 or email: rclark3@unl.edu.

A handwritten signature in cursive script that reads "Richard T. Clark".

Richard T. Clark
Professor and Interim Head

F O C U S

Economic Issues For Nebraskans

Department of Agricultural Economics • University of Nebraska-Lincoln

page 8



page 13



Feature Articles

Tributes to Deborah Ann Rood	4
Larry L. Bitney and Victoria France Lipovsky	
Water Rights Showdown Brewing	8
J. David Aiken	
Farm Profitability Project Identifies Alternative Markets, Production Systems	12
Ken P. Wurdeman and John C. Allen III	
Urbanization Pressures on Agricultural Land	17
Christopher R. Gustafson and Gary D. Lynne	
Institutions and Agricultural Productivity in Sub-Sahara Africa	21
Lilyan E. Fulginiti	
National Agri-Marketing Association Student Chapter	24
Matt Spilker	
Department Recognized Student Majors	26
Ronald J. Hanson and Jessica McKillip	

Departmental Programs and News

Focus on research	28
Focus on teaching	29
Focus on outreach	30
Focus on alumni	32
Focus on people	33

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by Larry L. Bitney, Professor Emeritus

Deb Rood, programs coordinator in the Department of Agricultural Economics, died in a car crash on the evening of August 1. Deb will be greatly missed by thousands of women and their families in rural Nebraska, as well as by her colleagues at UNL. Deb will be remembered for her programs that empowered rural women, for slipping into tennis shoes toward the end of the day at a conference, for her cheery smile, for making work fun, and her seemingly endless energy.

The annual Women in Agriculture — The Critical Difference conference held each September in Kearney is the flagship of Deb's programming efforts. Some 500 women gather at this conference each year to learn the latest in farm/ranch business management topics, community issues, and family issues. In addition, the women benefit from meeting others with similar interests and sharing ideas. Many networks and lasting friendships have begun at the Women in Agriculture conferences.

Deb began work in the department as a part-time editorial assistant in 1984. At that time, during the depths of the farm financial crisis, we were gearing up a new program for farm and ranch families called *Managing for Tomorrow*. This program focused on the whole family, but mostly couples participated in four days of workshops with on-farm follow-up visits.

Deb and a co-worker, Jane Pauley (now Jane Green), observed from the *Managing for Tomorrow* program that women wanted to be more involved in the farm/ranch business but felt they

needed more knowledge and skills. Deb and Jane proposed the concept of a management-marketing educational conference for women. The idea sold, and the first Women in Agriculture conference was held in 1985. The format of the first successful conference has remained the same over the years. Each May, Deb arranged focus groups of women in different areas of the state to find out what their concerns were. She then shared this information with co-workers and developed a list of topics for concurrent sessions. This was a key to the success of this ongoing educational program — the sessions always addressed current needs of the participants.

The 19th Women in Agriculture conference was held Sept. 11-12 this year. Deb's co-workers and many participants were determined that "the show must go on."

The Women in Agriculture conferences have proved to be productive incubators for new extension programs. For example, the Women in Agriculture Marketing Curriculum was developed when women attended a concurrent workshop on commodity marketing at the annual conference and wanted to learn more about marketing. The marketing curriculum was held annually from 1994 through 2001. It consisted of four two-day workshops held in March, June, August, and November. Deb, always on the alert for top-notch teachers, signed on Rosemary Hartter, a farm wife from Illinois, to teach basic marketing. Deb, staff from the agricultural economics department, and grain elevator operators rounded out the teaching staff. One of my favorite times of the year was the Novem-



ber session, when the women shared what they had gained from this workshop series. While each story was unique, there were two common threads — they were doing marketing activities that they had not done before, and with increased self-confidence they were taking on other activities and responsibilities that they had not done before. The empowerment of rural women may be the greatest long-run impact of Deb's efforts.

While working full time, Deb completed her master's degree in family and consumer science. Deb's focus on the family complimented her co-workers who had degrees in agricultural economics. Extension programs that focused on economics and financial management were broadened to include topics like family communication and the role of personality types in the decision making process. All of these topics affect the bottom line of a family business. Educational programs which integrated the

Continued on page 6.

Deborah Ann Rood

by **Victoria France Lipovsky**

We are newlyweds fresh to the country. We are transplants from the farm to the ranch. We are rural women who birth livestock, balance books, and care for others. We work in harmony with our Lord and our land to build strong families. We market crops, become entrepreneurs, and renovate our communities. And, yes, sometimes we must learn how to farm or ranch without our husbands. We did not imagine we must learn how to continue as women in agriculture without Deb Rood.

Deb welcomed each one of us with a smile, a laugh, and a positive attitude. Her energy and creativity made all things possible and everything interesting. Her passion and desire to meet our needs inspired us to develop our own potential. Her 19 years as director and co-creator of Women in Agriculture, its programs, and its annual conference enriched thousands of lives.

Deb listened to us. She identified with our problems and concerns. She used her contacts in the academic and business worlds to bring us dynamic speakers, vital information, and a supportive atmosphere. We asked questions, got answers, and felt good about wanting to know. We laughed and learned together with other women in similar and unique circumstances. Deb knew we gained as much from talking with one another as hearing from the experts. She encouraged us to reach out to other ag women for support beyond the annual two-day conference. She guided, guarded and directed our program. She could get 500 women together in one

room to laugh or cry or blend their voices to sing the doxology before our evening banquet. She was amazing.

One of our keynote speakers said, "People don't care how much you know until they know how much you care." Deb cared. She cared about us and our ability to cope with the variety of stresses and challenges we faced. She identified our concerns, recognized our potential, and brought us together with people who helped us. She looked down the road to see what new demands would come our way and searched for new strategies. And she did it all with a spirit of camaraderie and goodwill. We were all in it together, not to be negative and complain, but to share and lift up one another's spirits.

We left each conference with ideas and skills to use the next day. We renewed friendships and reaffirmed our kinship with agriculture. We were revitalized, energized, and better prepared to cope. And, of course, we looked forward to the next year's Women in Agriculture Conference. The recent depressed ag economy reinforced Nebraska's need for the program. Its value and benefits flow exponentially throughout our families, our communities, and our world.

In Deb's own words in a November 8, 2000, newsletter she described her calling. "When I was growing up in rural Nebraska (that was when southeast of Lincoln was rural) I thought that the year 2000 seemed so far in the future. Now it is here. I would have never guessed that I would be doing what I am doing back

then. Sometimes it's just better to let God do the planning; it turns out so much better than you can imagine. One of the things that I could not have imagined was being involved in a conference for ag women. Back then all I wanted to do was get away from milking cows. In fact all three of us girls wanted to get away from cows and all three of us girls married dairy farmers. With the twists and turns of our lives, I ended up in the Department of Ag Economics and have been very blessed to work here 16 years doing what I love doing...educating ag families."

Deb was a human being with trials and troubles just like the rest of us. As she said, "By now you should probably be used to me doing things last minute. Of course, my husband has been married to me for more than 25 years and he still shakes his head about my last-minute efforts."

Her positive attitude and strong faith helped us believe that good outcomes were possible and probable. She knew the power of prayer and the power of an ice cream break between workshops. Her open sense of humor and appreciation of good clean fun elevated our gatherings and our sense of purpose. Deb's confidence in our abilities made it possible for us to make a critical difference in our ag operations. Deb influenced our minds and our hearts. She made us feel important and valued as intelligent human beings, as women, as contributors to a way of life pursued by less than two percent of our nation's population.

Continued on page 7.

family and the business, showing the two are inseparable, made our programs unique and effective.

One such program is Returning to the Farm, started in 1989. The participants are students who want to return to their family's farm or ranch, their parents, and siblings in many cases. Parents come to campus for a Friday through Saturday workshop in December and another in January. Topics include financial analysis and projections, as well as an interpretation of the participants' personality types, an exercise in family communication, and goal writing. This program has continued through the years, benefiting many families.

Deb's emphasis on the family was personal too. Her parents and sisters were always at the Women in Agriculture conference. Her daughter Hannah typically accompanied her to the summer sessions of the Women in Agriculture Marketing Curriculum. She was thankful that her husband Dale could accompany her on trips to Chicago, Washington, D.C., and Australia. Her family always supported her efforts.

A toll-free telephone was installed on Deb's desk in 1985 as the first point of contact for families seeking financial counseling. Deb was skillful and compassionate as she talked with clients, discerned their true needs, and then assigned a counselor to help them. The counseling program ended after about three years, but the 800 phone stayed. Deb answered thousands of calls from our clientele over the years, ranging from those needing over-the-phone counseling to those wanting to register for a conference.

Deb helped rural women broaden their horizons through travel. She took several groups of women and their spouses to Chicago to observe the Chicago Mercantile Exchange and attend educational workshops there. These were women who had graduated from the Women in Agriculture Marketing Curriculum. In 1998, she took a group of Nebraska women to Washington, D.C., to participate in the Second International Conference of Women in Agriculture. Contacts made at this conference led to an invitation to present a paper at the Two Generation Farming Conference in Newcastle, Australia. Deb made contacts while in Australia that resulted in a group of Australians coming to the 2001 Women in Agriculture conference in Nebraska. In March 2003, Deb organized a trip for a group of Nebraskans to participate in the Australian Women in Agriculture conference.

Deb had primary responsibility for the Financial Preparation for Mediation program for several years. Her responsibilities included recruiting counselors, organizing training for counselors, assigning counselors, reviewing counselor reports, and writing reports for the Nebraska Department of Agriculture.

Deb's colleagues often sought her help, as she was creative and always full of ideas. In addition to the previously mentioned programs, she either was leader or team member in developing and delivering the following programs: Couples Management, Mentor, Professional Ag Producers Seminar, Decisions Now — Building Your Future, Marketing Blueprint, Agricultural Options, and Market Charting. She was also a member of the group that created Nebraska's Pork Central.

Deb was about to see one of her dreams materialize — Risk Management Cluster Groups, modeled after Home Extension Clubs. She had received a grant to do this and had set an organizational meeting for group leaders.

In the last three years, Deb increased her efforts to expand Women in Agriculture beyond Nebraska. She was in the process of organizing two regional Women in Agriculture conferences, one in Ohio and another in South Dakota. She was also organizing a national Women in Agriculture Train-the-Trainer conference to be held in Kansas City. She had just finished a proposal for a grant to help seven states start Women in Agriculture programs.

Deb's impact on the state of Nebraska and beyond is awesome. Hundreds of women have shared with me what Women in Agriculture and related programs have meant to them, from increased income due to changed marketing practices, to the satisfaction they feel when their father-in-law wants to talk with them about marketing; from attending a computer workshop at Women in Ag, to coming back two years later to teach a workshop on the topic, to describing a new venture they are launching as a result of motivation and confidence gained from Women in Agriculture. The list goes on and on.

Deb, we will all miss you.



We learned from Deb, traveled with Deb, and met her family. Our Women in Ag workshops taught us how to market, manage and mature. We covered topics from positioning ourselves between in-laws and outlaws to global positioning. The speakers Deb chose brought us not just information but confidence that we could better handle whatever life threw at us because we cooperated and communicated. We weren't alone in our quest. As we grew in our abilities some of us became workshop presenters and gave back to Deb and the program. Deb expected our best efforts for her women, and we were glad to do our best for her.

We traveled by motor coach to watch the Chicago Board of Trade in action. We learned the long miles across Iowa go faster with friends and conversation. We realized tall husbands wearing cowboy hats make good point men on crowded city sidewalks. We careened down the expressway with a taxi driver who watched television as he beat the lights and asked us about farm life.

Deb knew flying made some women downright uncomfortable. So she booked the airline with fresh-baked chocolate chip cookies for our flight to Washington, D.C., and the International Women in Ag conference. Her parents helped us upgrade our hotel rooms when rumors flew through the lobby that they were the King and Queen of Aksarben. Her husband Dale and daughter Hannah scouted the subway and kept us from getting lost in the big city. The story of

our ranch woman who disappeared through a hayloft hole generated laughter in multiple languages. She charmed the Australians and arranged exchange visits. We enjoyed many opportunities to leave our own backyards and "step outside the box" with Deb.

When she wrote a letter about the "North to Nebraska" Australian exchange of September 2001, she said, "The group was overwhelmed by the generosity of gifts, meals and hospitality that was given to them. This, is our first tiny step in creating links with other countries, I feel it can be considered a great success. This success is due largely to folks like you who showed the Aussies what it means when we say 'Welcome to Nebraska.'

"A news reporter asked me what I hoped we would get out of this exchange. My goal was for people to better understand each other and to learn from one another. A conversation with one of the Aussies demonstrates how we changed the attitude toward Americans for 14 Australians. After being here for a number of days, one of the Australians commented to me that we were nothing like what he had always thought Americans to be like. When I asked him what he thought we were like, he said, 'I always pictured them as rude, loud and arrogant.' I then asked him what he thought of us now and he said that the Americans

he met were the 'most generous, polite and gracious people [he had] ever known.' Quite a change in perception." The return trip to Australia in 2003 was a time for Nebraskans to change their perceptions about the world.

In one of her original poems, Deb compared ag women of Australia and Nebraska:

They worry about family, markets and farms, too
And when the rain is too much or too little
They must dig deep for joy and not be blue
A farming "Yank" or "Mate" must be of fine mettle.

Whether we were at home, out-of-town or out of the country, she was a source of understanding and a light to our path. We could depend on Deb.

Deb Rood's life was a celebration of faith, family, and friends. She went to sleep on earth and awoke in heaven. Her spirit lives on in her family, her friends and her women in agriculture.

Victoria France Lipovsky is one of hundreds of women who have participated in Deb's Women in Agriculture conferences. She and her husband, Robert, farm near Fairfield, Neb.



Water rights

showdown brewing

by J. David Aiken

Nebraska is a heavily irrigated state, second only to California. Nearly 7.5 million acres are irrigated from wells in Nebraska, with over 1 million additional acres irrigated from rivers and reservoirs. Nebraska has different legal rules for surface water irrigation and groundwater irrigation. Conflicts between surface water users are resolved on the basis of *priority*, or “first in time is first in right.” This means upstream appropriators “junior” to the downstream “senior” appropriator and must stop their water diversions if the senior needs the water. The legal rule for disputes among groundwater irrigators is *correlative rights*, or sharing. This means that during shortages all wells must reduce their pumping, not just the newest “junior” wells.

These conflicting legal rules are on a collision course. It is widely understood that groundwater withdrawals can reduce streamflow. Nebraska water law does not deal adequately with this issue because groundwater irrigators fear that when the streamflow depletion issue is legally addressed, well owners will lose. If the law required wells that deplete streamflow to be treated as surface water withdrawals, the priority rule would in most cases mean that the groundwater irrigators would be junior to senior surface water appropriators. Surface water irrigation developed decades before groundwater irrigation became widespread in Nebraska, so applying a first in time, first in right approach to disputes between surface water irrigators and groundwater irrigators would make most surface water irrigators senior appropriators and most groundwater irrigators junior appropriators. Consequently,

groundwater irrigators have used their numerical superiority to discourage legislative consideration of this issue.

A lawsuit arising in the Nebraska panhandle may end this legal stalemate. A historic water rights battle is brewing on Pumpkin Creek in western Nebraska. Pumpkin Creek, a tributary of the North Platte River, flows from eastern Wyoming into Nebraska through Banner County, joining the North Platte River in Morrill County near Bridgeport. Over 20 years ago Pumpkin Creek was the first stream to be closed to the issuance of new surface water rights by the Nebraska Department of Water Resources (now the Department of Natural Resources or DNR). In March 2001 the North Platte Natural Resources District (NRD) established the Pumpkin Creek groundwater management subarea and closed the subarea to new well drilling. Existing wells must be metered in 2003 and quantities withdrawn reported in 2004. The Pumpkin Creek subarea was established pursuant to a 1996 Nebraska statute authorizing NRDs to restrict groundwater uses to address conflicts between surface and groundwater users. The Pumpkin Creek subarea was established to deal with declines in both groundwater levels and streamflows.

Despite the NRD action, surface water irrigators have filed suit to establish their legal rights against groundwater irrigators. This is perhaps the most significant unresolved issue in Nebraska water law. The 1996 Nebraska integrated water management statutes authorize NRDs to control groundwater uses in response to conflicts between surface and groundwater users, and authorizes the

DNR to similarly control surface water uses. The statute does not establish, however, the legal basis for resolving disputes between competing surface and groundwater users, leaving to NRD and DNR discretion on the issue of whether surface or groundwater uses should be restricted during shortages and to what extent. This crucial gap in Nebraska water law may be filled as a result of a lawsuit filed by Pumpkin Creek surface water appropriators against groundwater users for depleting Pumpkin Creek streamflows. This article discusses how such conflicts have been addressed in other western states, how current Nebraska water policy deals with such conflicts, and the likely outcome if the case goes to court.

The subflow doctrine. Most western states apply the doctrine of prior appropriation to both surface water uses and groundwater uses. This means that the priority doctrine of “first in time is first in right” would apply to both surface and groundwater uses when those uses came into conflict. If junior wells interfered with senior surface appropriations, the junior wells would be required to either quit pumping or else provide replacement water to the senior appropriators. In Arizona, California, Texas and Nebraska, state law does not apply the prior appropriation doctrine to groundwater. However, in Arizona, California and Texas, if well pumping depletes streamflow, the well is treated as a surface water diversion under the subflow doctrine and is subject to priority. Nebraska is the only western state that has not yet adopted the subflow rule.

The following example illustrates the justification for the subflow rule. An applicant for a surface water appropriation is refused because the stream is overappropriated and there is no water available for new appropriations. If wells are not subject to the subflow doctrine, the unsuccessful surface water right applicant could simply drill a well near the stream and divert the water from the stream through the well at the expense of downstream senior appropriators. To prevent this from happening, all western states (except Nebraska) treat wells that deplete streamflow as a surface water diversion under the subflow doctrine, making them subject to priority like any other surface water appropriation.

Why has the subflow rule been opposed in Nebraska? First, groundwater irrigators outnumber surface water irrigators by a substantial margin. Second, many surface water irrigators also have irrigation wells, placing them on both sides of the issue. Third, the more numerous groundwater irrigators fear being subject to the “first in time, first in right” priority rule of Nebraska surface water law, as wells would likely be junior appropriations. Finally, some contend the state is better off allowing irrigation wells to interfere with surface water irrigators because more land is being irrigated in total than would be if wells were subject to the subflow rule. The result has been a longstanding legal stalemate.

However, applying priority to wells in Nebraska is becoming a more familiar circumstance. In the 1968 Blue River Compact between Nebraska and Kansas, the state of Nebraska must require junior irrigation wells within one mile of the river to stop pumping to protect streamflows into Kansas. This was first implemented during the drought of 2002 and again in 2003. In the 2001 settlement of the North Platte River lawsuit between Nebraska and Wyoming, the state of Wyoming agreed to regulate the use of junior wells depleting streamflows into Nebraska. In the Arkansas River litigation

between Kansas and Colorado, the state of Colorado was required in 1995 to restrict pumping by junior wells to protect streamflow into Kansas, and to compensate Kansas for past streamflow shortages caused by junior well pumping. In the Republican River lawsuit between Kansas and Nebraska, the U.S. Supreme Court’s Special Master ruled in 2000 that junior Nebraska irrigation wells were subject to the Republican River Compact. That case was settled when the states agreed to develop a computer model to identify the impact of well pumping on streamflows, and to guarantee specified river flows into Kansas.

Perhaps the most significant recognition of the streamflow depletion effect of wells is contained in the 1997 Platte River Cooperative Agreement. Signed by Nebraska, Wyoming, Colorado and the federal government on July 1, 1997, the parties pledge to maintain and increase Platte River streamflows for endangered species. The Cooperative Agreement contains a “no new depletions” provision that makes new or expanded uses of either surface water or of hydrologically-connected groundwater

junior to habitat flows. These junior uses must either replace their depletions of habitat flows or else stop their water use.

Nebraska is developing a plan called the Nebraska Depletions Plan to satisfy this “no new depletions” requirement for Nebraska water users. While the plan is still under development, it foreshadows what will likely be required for Nebraska to meet the no new depletions rule. Nebraska is implementing the Cooperative Hydrology Study (COHYST) to determine which wells are hydrologically connected to the Platte River and its tributaries (including Pumpkin Creek). Wells within the streamflow depletion zones identified in the COHYST study junior to the July 1, 1997 Cooperative Agreement will be subject to the no new depletions rule. Under the draft depletions plan, Nebraska would assume replacement water responsibility for the 1997-2003 junior surface and groundwater uses depleting habitat flows. The draft identifies a variety of options, including paying irrigators not to irrigate and other water marketing and conservation options, to meet the no new depletions requirement. Governor Johanns’ 2002



In Nebraska, 7.5 million acres are irrigated from wells, and 1 million more are irrigated from rivers and reservoirs.

Water Policy Task Force is currently considering these water policy options, as well as policy options for dealing with conflicts between surface water irrigators and groundwater irrigators.

The Nebraska rule. Why haven't Nebraska courts adopted the subflow doctrine? The simple answer is that Nebraska courts have never been faced with the case of a junior well withdrawing the streamflow needed by a downstream senior appropriator. A 1966 case can be interpreted as rejecting the subflow doctrine, but that isn't the whole story. This case is an interesting study of Nebraska water law and politics.

Our story begins with a 1936 Nebraska Supreme Court decision (*Osterman v Central Nebraska Public Power & Irrigation District*, 131 Neb 356). *Osterman* involved the development of Lake McConaughy and the construction of Kingsley Dam on the North Platte River near Ogallala.

Construction of the dam and reservoir system was very controversial — project opponents feared the Platte River would dry up downstream of the proposed dam, thus opposition was fierce, resulting in several cases heard by the Nebraska Supreme Court. The *Osterman* case involved the issue of transbasin diversion. Water from Lake McConaughy was intended to irrigate land in the Blue and Republican river basins in addition to the Platte basin. Project opponents contended this violated statutes requiring unused irrigation water to be returned to the river of origin. In its *Osterman* decision, the Nebraska Supreme Court agreed. Until *Osterman* was overruled in 1980, the decision barred the movement of surface water from one river basin to another.

The *Osterman* ban on transbasin diversions posed a significant legal obstacle to Omaha. In the early 1960s, Omaha sought to develop a well field on the Platte River near Ashland, from which the water would be withdrawn and

piped outside the Platte River basin to Omaha. Omaha representatives feared that under the subflow doctrine, Omaha's groundwater withdrawals would constitute a diversion of surface water and therefore be illegal under *Osterman*. The Nebraska Legislature was unwilling to overrule *Osterman* and legalize transbasin diversions. However, the Legislature did enact a 1963 statute authorizing cities to transport groundwater after a state permit had been granted. The

statute clearly was adopted to facilitate Omaha's moving groundwater from its proposed Platte River well field out of the Platte river basin into Omaha.

Omaha's proposed transbasin diversion was contested, and in reaching its 1966 decision (*Metropolitan Utilities District v Merritt Beach Co*, 179 Neb 783), the Nebraska Supreme Court was placed in an awkward position. If it followed the subflow doctrine, it then would have to ban the Omaha water diversion on the basis of *Osterman*. However, if the Court took the same approach as the Nebraska Legislature had — that water coming from a well was groundwater and not surface water — then the Nebraska Supreme Court would not need to address transbasin diversion. And that is exactly what the *Merritt Beach* Court did, ruling that because Omaha was pumping groundwater (from an island in the middle of the Platte River), the water was groundwater and not surface water and therefore the *Osterman* rule against transbasin diversion of surface water did not apply. The *Merritt Beach* decision is a classic illustration of the legal maxim "hard cases make bad law."

Interestingly, in 1980 the Nebraska Supreme Court reversed the 1936 *Osterman* decision, ruling that transbasin diversion of surface water was legal (*Little Blue NRD v Lower Platte North NRD*, 206 Neb. 535). The *Osterman* prohibition on transbasin water diversions was the main reason the 1963 legislature and the 1966 Supreme Court avoided the transbasin diversion issue in authorizing the Omaha water diversion out of the Platte basin into Omaha. Overruling *Osterman* now gives the Nebraska Supreme Court the opportunity to undo the legal mistake it made in rejecting the subflow doctrine in the 1966 *Merritt Beach* case.

It is very important to note that in *Merritt Beach* no surface water user was harmed by Omaha's proposed groundwater pumping. If there had been, the



The Platte River has long been at the center of Nebraska water law.

The legal rule for disputes among groundwater irrigators is correlative rights, or sharing. This means that during shortages all wells must reduce their pumping, not just the newest “junior” wells.

outcome may have been different and the Nebraska Supreme Court would have been more likely to adopt the subflow doctrine. It suggested as much in a 1994 water rights case (*Central Platte NRD v Wyoming*, 245 Neb 439, 451): “We note that the relative rights of those using groundwater and those using surface water are often unclear. The courts can begin to give outlines and shape to these rights, but only in a case-by-case, piecemeal fashion, and only when those rights are brought into direct conflict.” The court in *Central Platte* also indicates that groundwater could be appropriated, suggesting the Nebraska Supreme Court would be receptive to adopting the subflow doctrine.

Kansas v. Colorado. If the Pumpkin Creek lawsuit against groundwater users goes forward, it is likely to follow a pattern established for so-called “conjunctive use” lawsuits in *Kansas v. Colorado* (514 US 673). In this case Kansas sued Colorado on the basis that junior wells in Colorado were depleting Arkansas River streamflows into Kansas, depriving senior Kansas surface appropriators of their water. In the first liability phase of the lawsuit, Kansas and Colorado respectively spent tens of millions of dollars establishing that the Colorado wells were depleting streamflows into Kansas. When Kansas won that issue, the states then litigated the second penalty phase to establish (1) what Colorado

would be required to do to compensate Kansas for its past water shortages, and (2) how Colorado would prevent future water shortages for Kansas. Colorado will be required to pay Kansas for economic losses associated with past streamflow depletions, and junior wells in Colorado will be required to either provide replacement water to the stream or else stop pumping. The replacement water could come from new water storage or paying surface appropriators for storage and/or direct flow rights. A successful Pumpkin Creek lawsuit against junior groundwater users would probably yield a similar result.

The Pumpkin Creek case does present a somewhat different twist: For the surface water users to be successful (as they were in *Kansas v. Colorado*), they must persuade the Nebraska Supreme Court that it made a mistake in rejecting the subflow doctrine in *Merritt Beach*. The 1980 reversal of the 1936 *Osterman* decision indicates that this is possible; however, and in some regards there is less law to overrule in *Merritt Beach* than in *Osterman*. In any event, surface water users must make a convincing case that junior wells are depleting Pumpkin Creek streamflows in order to prevail. While that showing may be possible, it will be an expensive and complicated undertaking. However, the state of Nebraska’s COHYST study could make the legal proof that junior wells have depleted the

flows of Pumpkin Creek much easier. Indeed, it would be difficult for a court to reject the subflow doctrine, faced with a state study documenting that wells have depleted streamflow to the detriment of senior surface water appropriators for years.

If the Nebraska Supreme Court did adopt the subflow doctrine in the Pumpkin Creek case, what would that mean? Basically, the situation would be very similar to the outcome in *Kansas v. Colorado*: Junior groundwater irrigators would need to provide replacement water to Pumpkin Creek surface water irrigators (similar to the proposed Nebraska Depletions Plan) or else simply purchase the senior surface water rights to Pumpkin Creek. Groundwater irrigators could also be liable for past interference with surface water rights. While these costs would be spread over several hundred groundwater irrigators, they could still be expensive for individual groundwater irrigators.

It has often been observed that if Nebraska groundwater were red, Nebraska streams would be various shades of pink. Nebraska water law is slowly beginning to recognize that inescapable hydrologic fact. Statutes enacted in 1993 and 1996 clearly recognize and acknowledge that surface water and groundwater may be physically connected, but they stop short of establishing a comprehensive legal framework for resolving surface/groundwater disputes. The Pumpkin Creek lawsuit may provide the crucial missing piece of that unsolved legal puzzle.

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Farm profitability project identifies

alternative markets, production systems

by Ken P. Wurdeman and John C. Allen III

Small farms struggle across the country, but especially in the North Central region where commodity crops and livestock are the dominant agricultural sectors. The number of small farms has steadily decreased, and the profitability of remaining farms is marginal in many cases. Alternatives exist for small farms, but often producers are not provided with a critical examination of the comparative advantages and disadvantages of the choices.

The North Central Initiative for Small Farm Profitability is a multi-

institutional, farm-to-fork project designed to develop and disseminate knowledge on strategies demonstrated to improve the economic success of small and mid-size farms and ranches. Components of the project include research on high-value, niche products and markets, case studies of successful strategies, and integration of the research through groups of farmers and ranchers who share an interest in innovative alternatives to traditional agriculture.

Led by the University of Nebraska-Lincoln's Center for Applied Rural

Innovation and the Food Processing Center, the three-year initiative includes a consortium of institutions and organizations in four states — Iowa, Missouri, Nebraska and Wisconsin — representing the full diversity of agriculture and many alternative agricultural approaches within the north central United States region. The other institutions/organizations of the consortium are Iowa State University, the University of Missouri, the University of Wisconsin, the Center for Rural Affairs (Nebraska), the Michael Fields Agricultural Institute (Wisconsin), and Practical Farmers of Iowa. Nearly 30 scientists, marketers, extension educators, economists and program leaders contribute to the consortium, providing a synergy created through shared resources and expertise that greatly exceed any that would result from individually funded projects. Producers gain direct access to the expertise, research and education of seven institutions spanning four states, rather than one or two institutions in their own state. The initiative started in 2000 and is funded by a three-year grant from the U.S. Department of Agriculture's Initiative for Future Agricultural Food Systems.

Producer Clusters

Central to the project are 32 producer clusters, including 11 in Nebraska. These groups of farmers and ranchers help identify areas of



Sharon Rose and Gene Gage stand in one of their greenhouses at Papa Geno's Herb Farm near Roca, Nebraska. The company has used the Internet to turn a small mom-and-pop operation into a leading e-business.

research, education, and outreach needed by their clusters or communities and provide practicality and relevance to the initiative's objective of increasing farm profitability.

The producer groups vary widely in their level of maturity and involvement in alternative markets, with some groups organized specifically for this project and others in existence for many years and already working with service providers on production and marketing efforts. Alternative enterprises in the four states range from the direct marketing of meats and vegetables to exploring the profitability of raising and selling grapes, nuts and fish. Four of the 11 Nebraska clusters tend to be concentrated on producing and marketing meats; however, other groups are involved in growing grapes and producing wine (two), dairying (two), processing and marketing hard white winter wheat and jalapeno peppers, and aquaculture production.

Pre- and post-survey instruments are used to ensure the initiative has impact, measuring attitudinal, knowledge and behavioral change in cluster participants, changes in farm income and production practices, and other pertinent indices. A baseline survey of 103 cluster members in the four states indicated the typical cluster member is 47 years old, has an annual household income of \$50,000, has 20 years of experience in an agricultural operation and buys 90 percent of the farm's inputs locally. The average cluster is 10 members. Although pasture was the most common "crop" grown among the producers, 48 percent grew corn, 44 percent grew alfalfa, and 37 percent grew soybeans. Seventy-nine percent of the respondents own livestock of some type, with beef cattle the most predominant. Cluster members on average direct market 47 percent of their products.

Marketing and time were two of the greatest needs among the cluster members. Eighty-six percent felt that an increased marketing effort was needed to convert more of their farming operation to a sustainable practice, while 83 percent

said that more time and management were needed for this conversion. Only 21 percent felt that their cluster had adequate marketing information. Few producers strongly felt that they had sufficient knowledge on how to implement more sustainable farming practices and how to find local markets for their products. This shows a clear-cut need for these services. Over half (53 percent) of the cluster members considered their cluster to be immature in their activities with 30 percent indicating that the cluster was very immature.

One of the producers involved in the initiative is Kim Keeling who raises 12 acres of jalapeno, habanera and other varieties of peppers near Sutherland. Keeling has started a small business, Booty Farms, to process the peppers into seasonings, including chipotle. Chipotle is dried and smoked jalapeno peppers.

"It's been nice to access some of the marketing, business planning, and food analysis capabilities of the initiative," Keeling said. "My goal is not to be the lowest cost bulk supplier of peppers. I want to add value to my peppers by drying and smoking them and selling them in the value-added form of chipotle seasoning."

Keeling calls his chipotle seasoning "Booty Farms Blazin' Rump Rub," which is available online at <http://BootyFarms.com>.

Case Studies of Strategies That Work

Case studies have been used as a core feature of developing solutions for family-owned and operated farms and ranches. Seven case-study categories were examined and are being used in outreach and



Annie Kime, founder and owner of Annie's Jellies and Jams, stands next to some of her wild fruit jams and jellies made from hand-picked berries native to the Sandhills of central Nebraska. The company uses the Internet to reach customers far from their isolated rural locale.

education activities. Each case study focuses on a strategy that has potential to improve the efficiency, profitability, and competitiveness of small and mid-size farms. The case studies address and draw lessons from both successes and failures of the strategy and are used to identify best practices. The case studies draw on data as well as on subjective insights.

Case study categories include marketing networks, shared production systems, use of the Internet to market products, on-farm diversification strategies, capital transfer strategies, community support, and new generation cooperatives. For a list of case studies, see the sidebar on page 16.

For example, the case study "Grown Locally" details how an 11-member cooperative located in a predominantly rural area of northeast Iowa has focused on creating and expanding institutional markets for local foods (schools, hospitals, retirement communities, etc.), educating its members and local food

buyers, and being a model that can be replicated in other areas. The significant contextual feature of this group is that it has successfully operated in a very rural area with minimal help from outside funds or expertise, which sets it apart from many of its urban counterparts.

Another reveals how Papa Geno's Herb Farm in Roca, Neb., has utilized the Internet to turn a small mom-and-pop operation into a leading e-business of herb plants, scented geraniums, vegetable seedlings and herb-derived crafted goods.

Lessons learned are also detailed in the case studies. "Select! Sonoma County (California): A Long-Lived Marketing Program Faces Hard Times" explains how economic, agricultural and demographic changes have caused severe financial stress for the organization. "Walton Bean Growers Cooperative" describes the challenges of expansion and the financial risks of investing in a new generation cooperative.

Market Research Identifies Niche Opportunities

Farmers and ranchers who desire to switch to alternative enterprises or market outlets to remain profitable often quickly discover that the range of alternatives is sizeable. The level of information relating to processing and marketing aspects is frequently unavailable or misunderstood by producers. A critical component of the North Central Initiative for Small Farm Profitability is comprehensive market research that provides producers with the information needed to make a wise and informed choice about various alternative products and the best means to process and deliver these products to consumers.

The UNL Food Processing Center specializes in providing business, marketing and technical assistance to entrepreneurs in the value-added food processing industry and has identified

Figure 1. Attributes important to meat purchasing.



Figure 2. Retail growth of specialty cheese.

Top 10 Fastest Growing Natural Cheeses at Retail Shown is the % Increase for the Year 2000		
	Volume Dollar Sales	Dollar Sales
Asiago	52.4	49.9
Gorgonzola	37.3	47.1
Provolone	35.3	39.6
Muenster	30.1	31.8
Colby Jack	23.6	16.7
Brie	16.4	19.4
Goat	16.1	17.6
Blue	15.6	19.4
Havarti	14.0	23.1
Swiss	13.8	15.8

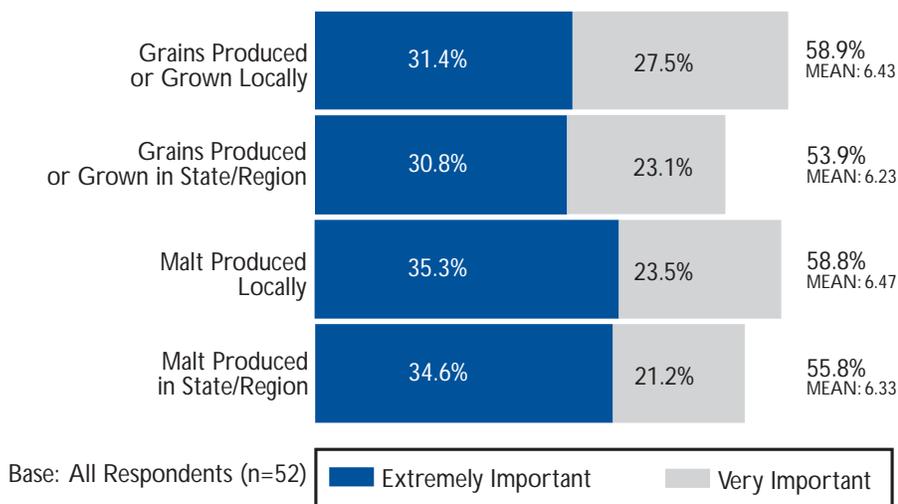
Source: "Cheese for All," Dairy Foods, April 2001

several untapped markets for producers as part of the initiative.

A survey of more than 500 households in Iowa, Missouri, Nebraska and Wisconsin highlighted the potential for selling locally grown food to grocery

stores, restaurants and consumers. Food safety, quality of meat and USDA inspection were the top three attributes listed by consumers in selecting the meat they purchase. Price was ranked sixth among the 17 attributes listed by consumers (Figure 1). Producers wishing to

Figure 3. Level of interest from breweries in making the claim that their beer was made with grains and malt produced or grown locally.



direct market their beef, pork, chicken or other meats can use this information in their marketing and advertising efforts, stressing food safety and the quality of their product (Figure 1).

Another market research study identifies the explosive growth of specialty cheese consumption and opportunities and barriers associated with entering the specialty cheese market (Figure 2). The report also explores the growth of another unique niche market, the farmstead cheese market. A farmstead cheese is an artisan cheese—one handmade in small quantities that are produced on the farm using only milk from the herd located on that farm (such as a grass-based, seasonal dairy farm). This industry is rapidly growing in California and Wisconsin. There are no commercial specialty cheese plants in Nebraska.

A report on “Supplying Craft Breweries with Locally Produced Ingredients” summarizes the findings of a survey of 52 craft breweries (micro-breweries, brewpubs, regional breweries) in a six-state region. The report shows the profit potential for farmers who have an interest in supplying craft breweries with locally grown wheat and barley. The findings show that 59 percent of the

breweries are very or extremely interested in the ability to make the claim that their beer was made from grains produced locally (Figure 3).

Another report provides producers with information on supplying food service establishments with locally grown food. The report includes results of a survey of chefs belonging to a nationwide organization called the Chefs Collaborative. Seventy-three percent of the chefs responding agreed with the statement that “Purchasing locally grown food has had a positive impact on my foodservice establishment’s bottom line profits.”

Producers can use this market research, traditionally available only to bigger businesses and at high cost, as decision-making and marketing tools.

Research at the University of Wisconsin Center for Integrated Agricultural Systems explores the potential of pastured poultry as a supplemental and primary source of farm income. Pastured poultry involves raising broiler (meat) chickens on pasture in small, movable pens. The research has built upon base research done in 1999-2000 on five poultry farmers in Wisconsin and Minnesota who raised less than 5,000

birds per year. Current research includes interviews with pastured poultry farmers who raise more than 5,000 birds per year. The range is 5,500 to 50,000, with an average of 14,500 chickens. Data has been collected and analyzed on production, processing, marketing and financial issues. In addition, the researchers have developed a poultry enterprise budget spreadsheet to help farmers make financial and management decisions about new or existing poultry enterprises.

Other research, identified by input from the clusters in the four states, focuses on small meat processing plant efficiencies, schools as a market for locally-grown fresh fruits and vegetables, and the market potential for locally-grown grapes/wine and chestnuts.

Additional activities of the Initiative include business planning courses and an analysis that identifies the characteristics of successful small to mid-size farms and classifies those characteristics based on their ability to be replicated on other farms.

Dissemination and Outreach Activities

A web-based clearinghouse, developed by the UNL Food Processing Center, serves as the main electronic dissemination method for all case studies, research results, publications, and survey data. The Web site address is www.foodmap.unl.edu.

Additional dissemination activities include working with the cluster groups to present public workshops on business planning, best production practices and market development strategies to communities adjacent to and beyond the producer clusters.

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Case Study Categories and Titles

New Generation Cooperatives

- Dakota Lamb Growers Cooperative
- Southwest Minnesota Agrifuels Cooperative
- Walton Bean Growers Cooperative
- CROPP Cooperative

Networks for Marketing High Value Crops and Livestock

- Buttering Up Your Customers: Direct-Market Dairy Products Keep Profits on the Farm
- GROWN Locally
- North Star Neighbors: Neighbors and Friends Working Together
- Small Farm Cooperative: Quality and Innovation

Production Systems and Cooperative Arrangements

- Bruegman Grass-Based Dairy: Simply a Better Product
- Can Smaller Be Better? A Comparison of Grass-Based and Conventional Dairy Farming
- Less Land, More Profits: Organic Crop Production Makes a Stand
- Letting Pigs Be Pigs: Building a Better Hog Operation
- Libby Creek Farm: An Organic Alternative
- Summer Calving: A Practice to Improve Profits

Community Support

- Puget Sound Fresh
- Select! Sonoma County: A Long-Lived Marketing Program Faces Hard Times
- The Dane County Farms and Neighborhoods Initiative: Saving the Country, Saving the City

Capital Transfer Strategies

- A Farm for the Future: Using Innovative Programs to Pass on the Farm
- A Good Start: Investing in a Beginning Farmer
- A Thriving Dairy: Cooperating for Success
- Generational Transfer: A Tale of Four Brothers
- Going Home: Taking Over the Family Farm
- Growing a Farmer: Passing on Assets and Experience
- Locally Grown: Neighbors Working Together
- Working Dreams: A Transfer in Progress

On-Farm Diversification Strategies

- At-Home with the Claytons: An On-Farm Bed & Breakfast Experience
- Straight Arrow Bison Ranch
- Tarbox Hollow: A Home on the Range

Successful Use of the Internet to Market Products

- Annie's Jams and Jellies
- Papa Geno's Herb Farm
- Planning for Success: Uplands Cheese Company
- From Wheat to the Web: Changing the Way Farmers Buy Equipment

Urbanization pressures

on agricultural land

by Christopher R. Gustafson and Gary D. Lynne

Ever noticed what is happening to the countryside in the Fremont area north of Lincoln and west of Omaha? In a nutshell, these two cities are expanding rapidly into the areas and moving into rural Saunders County in particular. The expansion includes various kinds of urban development, with significant numbers of single-family residences being built on acreages.

A study conducted by the UNL's Bureau of Business Research and reported in a June 16, 2000, *Omaha World Herald* article, projects that by 2050, eastern Nebraska could be dominated by a metropolitan area stretching from Missouri Valley, Iowa, to Lincoln. This area would be comprised of urbanized and low-density residential areas. The interface between agricultural and residential areas could create the conditions for conflict between any remaining agricultural producers and acreage-owning commuters, especially in the low-density residential areas.

Saunders County is situated in this path and is in the area that the Bureau of Business Research predicts will be filled with low-density residential areas. Most of the land in these rural areas is owned by farm operators or is rented to farmers by landowners whose family previously farmed. In either case, the landowner generally has a history with the land.

As a result, many Saunders County farmers may experience conflicting feelings when deciding what to do about these urbanization pressures. On one hand, the financial return on selling their land could be very high. An earlier study

reported corn or soybean producers around Lincoln (approximately 30 miles from Wahoo, which is Saunders County's governmental seat) could afford to pay \$1,500 to \$2,000 per acre for good farmland in 1996, while at the same time, developers were paying \$10,000 to \$15,000 per acre near the city limits, and \$3,000 per acre for land more than 15 miles from the city's edge.

Families of those who responded to the survey used in this study owned or farmed land in the area of their residence for an average of 80 years. We might reasonably expect that an "endowment effect"—an individuals' tendency to value more highly goods that were given to them or that they previously possessed—could lead to individuals willing to pay to preserve the land in its current state. More generally, we might expect a kind of "unity effect," wherein owners develop a connection with a tract of land, perhaps due to memories of a childhood spent on that land, or a connection with the way of life associated with that land, that may go beyond their financial interest in it. We might say this individual has both an "other-interest" in remaining connected to the land and keeping the land and the surrounding community intact, as well as a self-interest in the financial gain that could occur from selling it into development. These two interests could then be in conflict and would need to be balanced, as suggested in new scientific findings about the actual nature of human nature. The idea is that by seeking both interests at the same time, individuals reach even better outcomes through an integrated balance. Each interest helps the other.

If this other-interest—in this case in farmland preservation—is the motive that is revealed in an individual's acted-upon decision, there are a number of options to facilitate that intention. One possibility is for a farmer or landowner to use conservation easements, which are donated or compensated transfers of some property rights to a governmental agency or nonprofit organization. A second possibility is a program known as a transfer of development rights, wherein development is strictly limited in agricultural zones, except in areas specified for high density residential development. The final option, and the one of focus in this study, is a purchase of development rights. A Purchase of Development Rights program is used to compensate farmers for the development rights on their land. When the development right has been removed from the property rights bundle, the farmer no longer has the right to develop their land. The Purchase of Development Rights program pays the farmer the difference between the value of the land with and without development rights.

Approach to Understanding the Decision to Preserve Land

A study to indirectly measure the "unity effect" possessed by farmers and agricultural landowners in Saunders County was conducted to better understand the land preservation discussion. We asked how much they would be willing to donate annually to a public organization that would be charged with landscape preservation through a Purchase of Development Rights pro-

gram. Another purpose was to determine what factors are motivating this decision, especially looking at how the self-interest in financial gain and the other-interest — being in unity with the land and the community including the environment— are being balanced, following a new approach.

A method known as contingent valuation is the most appropriate research tool for this study. This method asks an individual to state their willingness to pay for a public good like the attractiveness of a farm landscape. We provided those surveyed with background information about the situation and the concept of a land trust that could be set up to facilitate purchasing development rights. Everyone was reminded that spending money to purchase land development rights meant less money to spend on other goods and

services such as dinner and a movie or a new truck (*Figure 1*).

The survey was conducted in late spring 2002. We mailed a questionnaire to all 1,838 agricultural operators and landowners in Saunders County, using a list provided by the Saunders County Farm Service Agency. A total of 321 surveys were returned, giving a response rate of 18 percent.

How Much Are Operators and Owners Willing to Pay?

Out of 321 total survey responses, 303 or 94 percent, answered the willingness- to-pay question. Approximately 24 percent of these answered “yes” — they would be willing to pay an annual fee to support a public institution charged with purchasing the development rights off of

agricultural land. About 80 percent of those who said “yes” gave a dollar estimate, with an average offer of \$254 and a range of \$10 to \$1,500. The others who said “yes” answered that it would depend on their income that year; that they were not sure; or they simply left it blank. The average response for the entire sample was \$51.18, including those who said “no” (which means an offer of \$0), so the overall range in the offer was from \$0 to \$1,500 per year.

What Influences the Willingness-to-Pay?

Respondents were asked to indicate where they were on each of several scales. As a result, we can suggest five reasons some are more likely to say “yes” and, in addition, are willing to pay more to preserve some agricultural land:

Figure 1. Respondents to the survey were asked to answer the following:

Please look at the photographs. The first photograph represents a landscape currently used in agricultural production. The second photograph represents the land under development. The third photograph shows the land fully developed. Determine how much money you would be willing to give annually in a payment or donation to the local land preservation group. The money would be used to purchase the development rights off of Saunders County land and would slow the pace of development, leaving more open space as in the first photo. Remember to consider other budgetary constraints and commitments when making your decision. Only indicate an amount you would truly be willing to pay. Carefully consider the differences in the photographs before answering.

Would you be willing to pay some money each year to support this group and to avoid these land use changes?

No Yes

If yes, how much? \$ _____ per year.



1. A lower score on the “selfism” scale, a standard measure of how oriented one is to the pursuit of self-interest, represented in a statement like: *It is more important to live for yourself than for other people, parents, or posterity.*

2. A higher score on the “influence” scale: *In general, how much do you care what (other) groups think about keeping your land in agriculture?*

3. A lower score on the “control” scale, represented in: *Having complete individual freedom to choose in the decision to sell farmland into development is fundamental.*

4. A larger percentage of net household income from farming.

5. Higher net household income.

How much more responsive are individuals in their willingness to pay given these factors? Some indication of the influence is shown in *Table I*. Scores on the first three items — balance, influence and control over choice — suggest a 1 percent change will increase the probability of saying “yes” by 2.4 percent. It will increase the amount one is willing to pay by 0.5 percent. That is, if one is balanced more toward the other-interest relative to the self-interest; second, paying more attention to others who believe that some agricultural land should be preserved; and, third, more willing to relegate some control over the land sale decision to outside authority (this is sometimes referred to as being more willing to accept some degree of outside-governance), then the probability of saying “yes” increases. The amount one is willing to pay also increases. Also, increasing the proportion of income from farming by 1 percent will increase the probability of saying “yes” by 1.9 percent. It will increase the amount by 0.4 percent. The probability of saying “yes” also increases, by 3.5 percent, and the amount one is willing-to-pay to support the purchase of development rights by 0.7 percent, for each 1 percent increase in net household income (*Table I*).

Table I. Willingness-to-pay^a for a land organization to Purchase Development Rights.

Influence	% increase in the probability will say “yes”	% increase in willingness-to-pay
Balance X		
Influence X		
Control ^b	2.4	0.5
% Farm Income ^c	1.9	0.4
Household Income ^d	3.5	0.7

^aRepresented as (0,\$), where the “0 = No” and the “\$ = amount, if Yes.”

^bBalance in the self-interest and other-interest multiplied times the degree to which outside influence affects the decision multiplied times the desired level of control over the decision

^cProportion of household income coming from the farm.

^dIn thousands of dollars.

Estimates based upon 168 limit observations, 48 nonlimit. Actual probability greater than limit is 0.2222. Predicted probability and willingness-to-pay at the mean is 0.1968 and \$55.74. The coefficients used to make these estimates are all statistically significant.

It also is of special interest to understand what goes into the “balance of the interests” in preserving farm land. What is the content of the balance that is being struck? That is, what ideas and concerns are included in the way individuals are balancing their interests? Think of this as what do you include as the most important factors in deciding how you balance your own interests? *Table II* addresses this question and shows that the most important components for the case of land preservation, measured in statistical significance, is a concern over rural viability, recreational opportunities, providing water in urban areas, ensuring a more favorable living environment and contributing to the good life in Nebraska. Intriguingly, as the new science of human behavior suggests, all of these are generally related to the “other-interest” pertaining to larger community effects that are not only financial in nature. Notice that none of the financial variables in the list, including the effects of urbanization on costs of servicing these developments and on the tax revenue issue generally, are a major part of how interests are being balanced.

Conclusions and Policy Recommendations

The results suggest that a public organization charged with preserving agricultural land probably could be successful. A similar study in Michigan showed that the Old Mission Peninsula effort needed to raise \$3.6 million over 15 years to preserve enough farmland for agriculture to continue to be a feasible industry. Annually, these numbers work out to be \$240,000, slightly less than what could be raised in Saunders County, operating under the assumption that our results can be extrapolated across all Saunders County households. That is, the average willingness-to-pay in the survey was \$51.18. If every household in the county donated this much to the land preservation cause, the result would be slightly more than \$275,000 annually. Assuming the price of the right to develop land is between \$1,000 and 1,500 per acre—based on the 1996 land prices referred to earlier—we arrive at an estimated range of 183 to 275 acres of farmland preserved per year.

The second objective of this study was to determine what would motivate a

Table II. Responses to “converting farmland to urban land at the current pace” and “what these outcomes mean to you,” Saunders County, 2002.

	Average answer ¹	Most concern ²
Reduces food security for the future	18	
Gives more jobs and economic activity in the area	17	
Damages wildlife habitat	29	
Increases the viability of rural communities	20	•
Reduces the variety of wildlife and plants	27	
Improves water quality	14	
Reduces hunting and recreational opportunities	26	•
Suggests we are being prudent in the use of land	17	
Makes more water available for urban areas	11	•
Adversely affects the aesthetic quality of the countryside	29	
Reduces the emotional health of people	22	
Leads to more favorable living environments for people	18	•
Enhances the good life in Nebraska	18	•
Reduces the public cost of servicing new developments	14	
Results in tax revenues at least equal to the cost of services (e.g., new schools)	20	
Increases the conflict with farming operations	31	

¹The “average answer” can range from 0 to 49, with an overall average of 16.

²“Most concern” means those items most influential in determining how respondents are balancing the self-interest in financial gain with the other-interest in maintaining rural communities, keeping more recreational opportunities, , enhancing the good life in Nebraska.

willingness-to-pay for such an organization. The results suggest that only by pursuing one’s own interests within a societal framework of liberties and influences can one hope to achieve at least a satisfactory situation. While each of us is unique and should be free and encouraged to pursue that which makes us happy, unfettered by the unreasonable demands of others, none of us is an island. We interact with others on a daily basis and come to expect the relationships that we have developed to continue to exist for us in the future. We become dependent on others and trust that they can be relied upon, whether they are parents, a spouse, a neighbor, or a cashier at Wal-Mart. We affect and are affected; we operate with varying degrees of self-control and outside-governance. We balance our interests, and those who balance more toward the other-interest represented in shared community are

more likely to help the move to preserving at least some agricultural land in the urban fringes.

Before any solid conclusions are drawn, more work needs to be done, especially to measure what urban residents in the affected areas would also be willing to pay to support the purchase of development rights on agricultural land. The fact that these results indicate that people are not immune to the needs and opinions of others, and indeed seek a unity with land as well as financial gain—all of this on-going along with the rapid urbanization of agricultural land—justifies further exploration into this issue.

Acknowledgements

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Institutions and agricultural productivity

in Sub-Saharan Africa

by Lilyan E. Fulginiti

Sub-Saharan Africa is one of the world's poorest regions. Its population of over 600 million and land area are approximately three times that of the United States. But unlike the U.S., 250 million people subsist on less than \$1 a day and in fact, the income per capita differential between the developed world and Sub-Saharan Africa has increased. While in the 1960s income per capita in developed countries was nine times that of Sub-Saharan Africa, in 2000 it is 18 times higher. There are approximately 200 million undernourished Africans, a 15 percent increase since the early 1990s and a doubling since the late 1960s. There are 25 million individuals infected with HIV/AIDS, approximately 14 million have died from it, and average life expectancy has declined from 62 to 47 years old. Seven countries in the southern cone of Sub-Saharan Africa have an HIV infection rate of one in five. The region's economies are heavily dependent on agriculture, which accounts for two-thirds of the labor force, 35 percent of GNP and 40 percent of foreign exchange earnings. Productivity performance in the agricultural sector, although not sufficient, is thus critical to improvement in overall economic well-being in Sub-Saharan Africa.

Productivity is defined as output per unit of input. Productivity growth aims at capturing output growth not accounted for by growth in inputs and it is the major source of long-run growth in well-being. It is a measure of the increases in output that are not explained by increases in traditional inputs, like, land, labor,

fertilizer, chemicals, but by increase in the efficiency in the use of these inputs and by technological advances. The present study, a joint effort with Dr. Richard K. Perrin and Bingxin Yu from UNL, addresses two questions about agricultural productivity in Sub-Saharan Africa. First, what has been the rate of productivity growth? Second, what potential institutional and sociopolitical factors have affected agricultural productivity performance in Sub-Saharan Africa in the last four decades?

Among the many alternatives available to estimate productivity growth, the one we adopt is the production function approach pioneered by Solow and Griliches and used by many others in the multicountry context. A semi-nonparametric Fourier flexible form is chosen to estimate total factor productivity growth in 41 Sub-Saharan African countries between 1961 and 1999. This form allows specification of the aggregate production process such that agricultural output produced is a function of traditional inputs such as land, labor, machinery, fertilizer, and livestock (used as capital) and has two other important characteristics. First, it does not impose a rigid mathematical structure on the estimation of technological change, but it allows the Sub-Saharan Africa data to dictate freely the evolution of this process. Second, it allows incorporation of institutional or sociopolitical variables traditionally not associated with the production process to be explicitly introduced to condition the productive process.

Our approach then is to consider productivity to consist of changes in output for given levels of this set of traditional inputs. Some measurable factors that we hypothesize may impact this productivity include the quality of labor and land, and institutional and political factors such as war that affect the ability or incentive of producers to extract output from a given bundle of traditional inputs. We call these efficiency-changing variables. Two types of efficiency changing variables are considered in this analysis: those that allow for *qualitative* input differences and those that will capture differences in the *institutional and sociopolitical* environment across countries. Although ideally in the first set we would like to have variables that would adjust all inputs for their quality, data availability restricts us to three: land quality, illiteracy, and droughts. We expect that higher quality land will induce higher productivity while droughts and a more illiterate population will be consistent with lower rates of productivity growth.

The second set of variables, also referred as institutional variables, are chosen to potentially capture the sociopolitical climate. The variables we have been able to acquire are: a) Colonial heritage because of its persistent influence in political, economic, cultural, military, financial and religious structure. We use dummy variables for former British, French and Portuguese colonies (versus ex-Belgian colonies, Liberia, a U.S. protectorate and Ethiopia as reference). b) Independence: the number

of years since independence. c) Armed conflict: we constructed three dummy variables to indicate minor conflict, intermediate conflict and war (contrasted with no conflict.) d) Political rights and civil liberties: two dummy variables to represent the Freedom House index of political rights and civil liberties that categorize countries as free or partly free (contrasted with not free), from 1972 to 1999. Because this last variable was not available for the whole period, we estimated two models, the “base model” that covers 1961 to 1999 but does not include this variable, and the “freedom model” covering 1972 to 1999 and incorporating political rights and civil liberties. We expect that war and violence will depress productivity growth while we have no priors for the other variables.

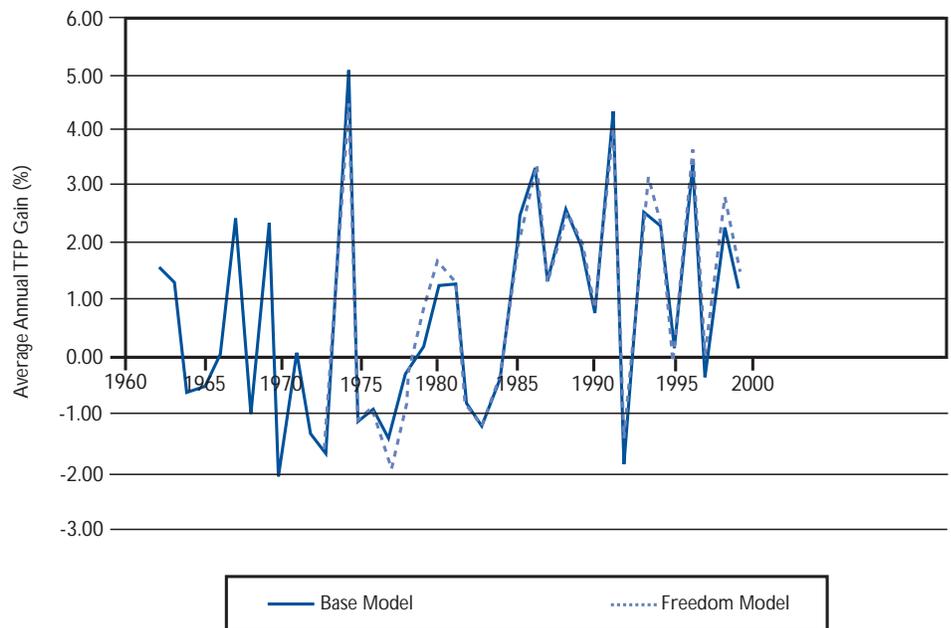
We find that Sub-Sahara Africa achieved average productivity gains of 0.83 percent per year over the four decades. Average gains were positive for each decade except the 1970s when average productivity declined at the rate of 0.3 percent per year (Figure 1, Table I). We find no readily evident causes for the failure during the 1970’s. Drought was not unusually prevalent during that decade. Wars and civil disturbances do not appear to be more severe during those years, either. Since 1985, average productivity gains for Sub-Sahara Africa agriculture have been quite strong, averaging 1.90 percent per year, a level comparable to those in industrialized countries, including U.S. agriculture.

In Table II we report the four-decade productivity growth rates for the individual countries. We have grouped the countries according to their colonial heritage, and it is evident that there are very substantial differences between these groups. The four former Portuguese colonies had the poorest performance, averaging -0.26 percent per year, with Liberia (former U.S. protectorate) about the same at -0.25 percent, the three former Belgian colonies next poorest with -0.17 percent per year. The 14 former French colonies came next with a positive

Table I. Average annual TFP change in Sub-Sahara Africa agriculture, by decade.

Decade	Average TFP change ----- % per year -----
1960s	0.68
1970s	-0.32
1980s	1.29
1990s	1.62
1961-1999	0.83

Figure 1. Annual average TFP change in 41 Sub-Sahara Africa countries.



average productivity gain of 0.52 percent, Ethiopia with an average productivity gain of 0.76 percent, while the 18 former British colonies performed the best with an average 1.08 percent productivity gain per year. Figure 2 charts these differences by colonial heritage groupings. It shows that trends, as well as levels, differ among the groups. The three Belgian colonies have done badly during the '90s because of armed conflicts, resulting in a marked downward trend in the rate of productivity change over the four decades. The UK group showed not only the highest average level of productivity gains, but

one of the highest growth rates in TFP gains, as well. The four ex-Portuguese colonies have had the strongest upward trend since the disastrous 1970s, achieving gains approximately equal to the ex-French colonies during the 1990s.

Another interesting result is that of the impact of political and civil rights on agricultural productivity growth. We find that when a country is rated “partly free” it is estimated to perform 26 percent better than when not free, while if it is rated “free” it performs 39 percent better. From these results, it is reasonable to

Table II. Average 1962-99 TFP gains by country

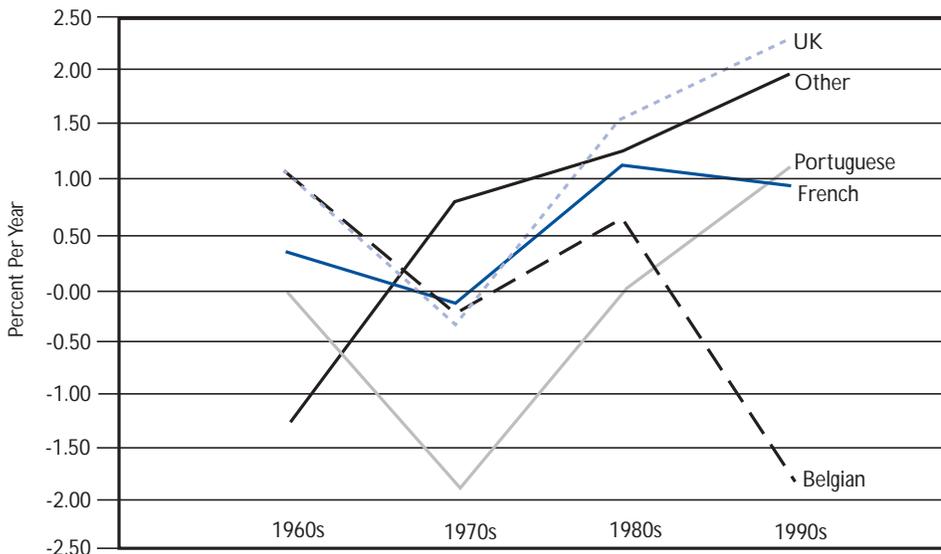
Former Belgian colonies:		Former British colonies:	
Burundi	-0.99	Botswana	-0.06
Dem Rep of Congo (Zaire)	-0.12	Gambia	-1.56
Rwanda	-0.01	Ghana	0.34
<i>average</i>	-0.17	Kenya	0.68
Former French colonies		Lesotho	-0.75
Benin	0.78	Malawi	-0.06
Burkina Faso	0.58	Mauritius	0.27
Cameroon	0.87	Namibia	0.48
Central African	0.95	Nigeria	1.59
Chad	0.34	Sierra Leone	0.11
Congo	-0.76	Somalia	-0.64
Côte d'Ivoire	0.57	South Africa	1.64
Gabon	0.13	Sudan	0.66
Guinea	-0.41	Swaziland	1.11
Madagascar	0.04	Tanzania	0.75
Mali	0.51	Uganda	-0.36
Niger	-0.43	Zambia	0.82
Senegal	-0.11	Zimbabwe	<u>0.35</u>
Togo	<u>-0.08</u>	<i>average</i>	1.08
<i>average</i>	0.52		
Former Portuguese colonies:		Former U.S. colony:	
Angola		Liberia	-0.25
Cape Verde	0.60	Independent:	
Guinea-Bissau	-0.26	Ethiopia	0.76
Mozambique	<u>-0.36</u>		
<i>average</i>	-0.26	<i>Average all countries</i>	0.83

infer that average differences in political freedom between former Portuguese and former UK colonies, for example, would result in a difference in performance of about 10 percent. It appears that there is ample opportunity for all of these countries to improve their agricultural efficiency and productivity by respecting political rights and civil liberties.

In essence, this study has shown that over the four decades the estimated rate of productivity growth in Sub-Sahara Africa was 0.83 percent per year, although the average rate from 1985 to 99 was a strong 1.90 percent per year. Former UK colonies exhibited significantly higher productivity gains than others, while Liberia and countries that had been colonies of Portugal or Belgium exhibited net reductions in productivity. We measured a significant reduction in productivity during political conflicts and wars, and a significant increase in productivity among those countries with respect for political rights and civil liberties. But, while productivity growth rates of this magnitude might be a necessary condition for welfare increases, we would like to stress that they are not a sufficient one, as the recent trends in malnutrition and life expectancy in Sub-Sahara Africa show.

For more information, e-mail Lilyan Fulginiti, fulginiti1@unl.edu

Figure 2. Decade average TFP by Colonial Heritage Groups.



References

Fulginiti, L., R. Perrin, and B. Yu. "Institutions and Agricultural Productivity in Sub-Sahara Africa." *Agricultural Economics* in print.

NOTE: In the spring/summer 2003 issue of *Focus*, an abstract titled *Institutions and Agricultural Productivity in Sub-Sahara Africa* appeared. This abstract was the forerunner to this article and Dr. Lilyan E. Fulginiti was inadvertently left off the abstract. We sincerely regret the omission of her name in the spring issue and apologize for this error.

National Agri-Marketing Association

student chapter

by Matt Spilker

The student chapter of the National Agri-Marketing Association (NAMA) combines theoretical principles learned in the classroom with practical application in the business community. Intertwined between classes and part-time jobs, NAMA students design promotional campaigns, network with area agribusiness and marketing professionals, and participate in workshops and discussion panels designed to enhance their interviewing and job skills.

The student chapter concluded a highly successful and enjoyable year. Last fall, chapter sponsors—companies who support NAMA with their time, expertise and financial contributions—attended a mixer to kick off the new year. Shortly afterward, students began working on their marketing plan for the annual marketing competition—a promotional strategy for a hypothetical family-owned vineyard and winery. Throughout the

year, students received guidance from Jim Ballard at James Arthur Vineyards, along with various marketing and advertising professionals from the Lincoln and Omaha areas.

In October, the student NAMA chapter hosted its first Resume and Interview Workshop. Representatives from the Nebraska Corn Board, Hoegemeyer Hybrids, NC+ Hybrids, and *Nebraska Farmer* offered their expertise in interviewing techniques. Eric Lemke, a May 2003 graduate in Agricultural Economics, capitalized on the opportunity by obtaining an accounts manager position with a local television network. According to Eric, “It was the Interview and Resume Workshop that got me that job. I really did well in the interview process.”

The remainder of the fall semester was dedicated to the marketing competition. Gibson Nene, an agricultural economics major from Zimbabwe, served as the student chapter’s vice president of marketing and coordinated the effort. Gibson, who plans on attending graduate school after graduation in December 2003, brought a fresh, new perspective to the chapter and its students.

The profes-

sional counterpart of the student chapter, the Midland’s NAMA Chapter, invited students to their meetings on a regular basis. Last October, students attended a meeting at Haymarket Park and heard firsthand about the marketing challenges encountered in the professional world. Representatives of Pinnacle Sports shared their experiences working with UNL’s Athletic Department. Kylee Wagner, serving as this year’s student chapter president, encountered some valuable networking opportunities. “NAMA really helped me understand what the professional environment is like,” she said.

Kylee, headed for graduate school at Kansas State University upon graduation this May, used NAMA as a means to enhance her leadership skills. “I know NAMA helped prepare me for graduate school.” Kylee has been an active member of NAMA for the past two years, and her influence will truly be missed. As one of Kylee’s fellow students said about her, “She’s been an amazing leader.”

Not to be outdone by her predecessor, Rachel Janousek, this year’s president-elect, has already been a great influence on chapter success. Rachel served as the chapter Annual Report Chair documenting all chapter activities. Thanks to Rachel’s efforts, and those of her peers, the UNL Chapter, for the first time in its history, placed in the top 10 nationally in the outstanding student chapter competition. Rachel also received a \$1,000 Agribusiness Educational Foundation scholarship at the annual meeting. Her experience will be invaluable as NAMA looks forward to another great year.



Kylee Wagner, Eric Lemke and Gibson Nene prepare for competition.

In February, NAMA also sponsored its sixth annual “Got Work?” employment discussion panel, attended by representatives of Pioneer Hy-bred International, Fontanelle Hybrids, Swanson Russell Associates, Ayres Kahler, and Data Transmission Network. The panel offered encouraging words to students as they concluded their college degrees and embarked on professional careers.

The highlight of the year was NAMA’s annual trade show in San Diego, which gave students an opportunity to present their marketing plan on a national stage. Each presenter—Kimberly Becker, Katie Frey, Eric Lemke, Gibson Nene, and Kylee Wagner—was a rookie to the NAMA marketing competition. Although UNL didn’t advance to the semifinal round as in years past, this group of students performed admirably. According to their advisor Matt Spilker, “All things considered, this is the best group of NAMA students we’ve had in the chapter’s six years of existence. They really did a tremendous job of expanding the chapter’s role on campus. With Rachel coming back, along with Katie and Kim, we’re returning some great leadership.”

Next year’s UNL student NAMA team will continue a great tradition. In addition to the usual chapter functions, a new mentoring program will begin as the students return to campus, providing yet another opportunity to taste the professional world. According to Matt Spilker, “We’re really developing professionalism and accountability. That’s what NAMA’s all about.”

For more information, e-mail Matt Spilker, mspilker@unl.edu or visit <http://agecon.unl.edu/aeac/nama>.



Who’s interviewing whom? Ryan Harms and Katie Frey enjoy a lighter moment at NAMA’s Interview and Resume Workshop.



(Left to right, front row) Rachel Janousek, Kylee Wagner, Kimberly Becker, Katie Frey; (back row) Eric Lemke, Ryan Harms, Eric Sweeney and Gibson Nene in San Diego.

Department recognizes student majors

by **Ronald J. Hanson and Jessica McKillip**

Student success is an important and integral part of the Department of Agricultural Economics. The strength of the department's undergraduate program is demonstrated by the academic achievements of its student majors. Nineteen outstanding junior and senior students in the department were honored this past spring semester for their academic accomplishments as agricultural economics and agribusiness majors at the University of Nebraska-Lincoln. The awards were presented at the department's annual awards program on May 1, 2003.

Outstanding Senior Award

Lisa Pfeiffer, Seward, and Andi Moseman, Belgrade, were awarded the Outstanding Senior awards. Both Outstanding Senior Award recipients have excelled in the classroom and are the two top ranking students academically for this year's senior class. Lisa and Andi both graduated from UNL in May with the honor of highest distinction. For a student to graduate with highest distinction from the College of Agricultural Sciences and Natural Resources (CASNR), they must maintain a cumula-

tive grade point average of 3.950 to 4.0. Lisa will continue her education by entering the graduate program in August at the University of California-Davis where she will work on her doctorate in agricultural economics. Andi has accepted a position as the agricultural loan officer at the Cedar Rapids State Bank.

Outstanding Agribusiness Senior Award

Julie Frey, Hay Springs, and Misti Kuenning, Imperial, were awarded the Outstanding Agribusiness Senior awards. The Outstanding Agribusiness Senior award is given to the student who has excelled academically in the classroom and contributed to the UNL Agribusiness Program through various leadership positions within the department, college, and university. Julie and Misti both graduated in May with the honor of high distinction. In order to graduate from CASNR with high distinction a student must have a cumulative grade point average of 3.90-3.949. Julie is now working for Wells Fargo Bank in Lincoln as a banking sales associate and Misti is employed with Deere and Company in Moline, Ill., as a marketing representative.



Lisa Pfeiffer accepts the Outstanding Senior Award from George Pfeiffer.

Wall Street Journal Award

Brett Behrends, Firth, received the Wall Street Journal Award. This award is given to students who have achieved superior academic achievements in the department. Brett graduated from UNL in May with the honor of highest distinction. Brett is now self-employed as a farmer.

Western Agricultural Economics Association Award

Gibson Nene, Zimbabwe, was the recipient of the Western Agricultural Economics Association Award. This award is given to a student who has excelled in economics and plans to continue their career or educational path in agricultural economics. Gibson will graduate in December 2003 and will enter the department's masters of agricultural economics degree program next January.

Superior Scholar Senior Award

Four students in the department were recognized as Superior Senior Scholars: Charles Frost, Lemont, Ill.; Jeffery Van Winkle, Beatrice; Andrew Fiala, Seward; and Keisha Patent, Randolph. This award is given annually to those graduating students who rank in the top 10 percent of the department's senior class. Charles Frost will graduate in December and is currently working on his honors thesis on the damage caused by black bears at U.S. National Parks. Jeff Van Winkle graduated in May with high distinction. Andrew Fiala will graduate in December with a dual major in agribusiness and agricultural economics. Keisha Patent graduated in May with the Honor of Distinction and attends Ohio State University, pursuing her master's degree in agricultural economics. In order to graduate from CASNR with distinction a student must have a cumulative grade point average of 3.80-3.899.



Ron Hanson recognizes Julie Frey (left) and Misti Kuenning (middle) as the department's Outstanding Agribusiness Seniors.

Outstanding Junior Award

Three students in the department of Agricultural Economics were awarded the Outstanding Junior awards: Trent Blare, Ideal, S.D.; Anthony Dowling, Randolph; and Rik Smith, Laurel. These three Outstanding Junior Award recipients have excelled in the classroom and are the top three ranking students in the department's junior class with a perfect 4.0 GPA at UNL.

Superior Scholar Junior Award

Six students in the department were recognized as Superior Junior Scholars: Anneke Gustafson, Mead; Michael Hanson, Pender; Jesse Luebbe, Waco; Chandra Ruff, Lincoln; Brock Thorberg, Elgin; and Joel Wesely, Milford. This award is given to those students ranking in the top 10 percent of the department's junior class.

The department continues to boast the largest number of student majors for

the College of Agricultural Sciences and Natural Resources. "The underlying success of our undergraduate program has always been the tremendous caliber and talent of our departmental student majors," states Ron Hanson, chair of the Undergraduate Program Committee. "The overall academic accomplishments and campus leadership achievements by our students is indeed impressive. Most importantly, these students have been ambassadors and role models for our department in helping recruit new students into our academic programs. The Annual Student Awards presentation is a great way to recognize and honor these students for their hard work and dedicated efforts at the end of each school year."

The department congratulates these student award winners for 2002-2003 and offers best wishes for continued success in the academic programs and career endeavors.

For more information, e-mail Ron Hanson, rhanson1@unl.edu.

Focus on research

Research on International Trade and Development

Two graduate and two undergraduate students are currently working on research projects related to international trade and development. Somali Ghosh, a graduate student, is examining whether developing countries have a comparative advantage in the production and export of goods that are produced with technologies that pollute the environment. If they do, trade liberalization through the World Trade Organization (WTO) or regional trade agreements such as NAFTA, would be expected to lead to greater concentration of polluting industries in developing countries. A related project that will be carried out by Chandra Ruff with funding from UNL's Undergraduate Creative Activity and Research Experience (UCARE) program will focus on the issue of sustainable development in low-income countries through an examination of how foreign aid affects the kinds of development projects that are implemented in these countries. Hong Guan, another graduate student, is focusing more directly on U.S. exports by analyzing the impact of China's entry into the WTO on U.S. corn exports to that country. Finally, Trent Blair is working on a project to assess the implications of a new agricultural agreement in the WTO for U.S. agriculture. The current round of negotiations on agriculture has been underway since 2000 and it is likely that a new set of international rules to regulate agricultural trade will be adopted in the near future. These rules will have a significant impact on U.S. agriculture.

E. Wesley Peterson

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Consumer Willingness-To-Pay For Various Beef Steak Palatability Attributes

Consumer panelists from Denver and Chicago tasted steak samples and participated in an experimental auction to determine their willingness-to-pay for their preferred samples. The samples differed in marbling, tenderness, country of origin and aging method. Marbling and tenderness had a significant impact on ratings, and a more tender sample increased bids as well. Steak samples from Australia and Canada were rated lower, and bids were \$1.07 and \$0.37 per pound lower than for the U.S. samples. Dry aged steaks were rated lower and the bids were \$0.34 per pound lower. Panelists' flavor rating had the largest impact on their bids.

All 200 steak samples were classified by USDA Quality Grade and by tenderness level. The average bids for the "Tough" category of steak, regardless of quality grade, were significantly lower than for the other categories of tenderness. Bids

for steak samples with sufficient marbling to only qualify for the USDA Select grade were significantly less than bids for the other higher grades. On average, bids for steak samples in the "Moderate" and "Tender" categories with sufficient marbling to grade USDA low "Choice" or above were all equal.

Dillon M. Feuz, Wendy J. Umberger, and Sebastian Perversi.

For more information, e-mail Dillon Feuz, dfeuz1@unl.edu, or phone (308) 632-1232.

An Evaluation of Labor Costs of Nebraska Feedlots

Labor resources are becoming an increasingly important issue for all agribusinesses. Being able to obtain labor with the necessary skill set, afford the labor they have, and retain employees are key concerns of managers and owners of agribusinesses, particularly those with operations in rural areas. Managing labor expenses are especially important for low margin businesses such as commercial cattle feeding operations. Labor costs differ across feedlots in Nebraska due to the highly variable size and scope of their operations. After feeder cattle and feed costs, labor costs comprise a substantial portion of the cost to produce fed cattle in commercial feedyards. If feeders have knowledge of the industry average and minimum labor costs for operations of various sizes and scope, they may be better able to manage labor costs and maximize profits. This ongoing research project, conducted with the assistance of Nebraska Cattlemen's Association, is to analyze the labor costs of feedlots across Nebraska to provide them with knowledge of how their size and scope of operations influence their labor expenses per unit of production. Further, this research seeks to provide appropriate benchmarks for both production and administrative labor at feedyards, information that managers cite as being increasingly important. Because employer expenses for employee benefits and insurance have increased dramatically, many cattle feedyards are increasingly examining direct and indirect labor expenses. This study will assist them by providing them with industry average and minimum costs for salary and benefits.

Rik Smith, Darrell R. Mark, and Richard T. Clark

For more information, e-mail Darrell Mark, dmark2@unl.edu, or phone (402) 472-1796.

Focus on teaching

UNL Students Study French Agriculture

This past spring marked the 10th consecutive year that College of Agriculture and Natural Resources students had the opportunity to travel to Dijon, France to study agriculture and agribusiness. The exchange involves the University of Nebraska and *Establishment National d'Enseignement Superieur Agronomique de Dijon*. Thirteen UNL students traveled with Dr. George Pfeiffer and students and faculty from Cornell University and the University of Kentucky for a two-week visit. They saw and discussed agricultural practices, trade, policy, and agribusiness issues with French producers, agribusiness people, faculty, and students. Similarities and differences between French and U.S. agriculture were noted and evaluated. Students involved included those majoring in agribusiness and agricultural economics, animal science, agronomy, food science, and agricultural education. During the 10 years of the exchange, more than 100 UNL students have had the opportunity to participate. Approximately the same number of French students have come to UNL.

George H. Pfeiffer

For more information, e-mail George Pfeiffer, gpfeiffer1@unl.edu, or phone (402) 472-1775.

Grad Students in Agricultural Economics and Agribusiness

The Department of Agricultural Economics offers master of science (MS) and doctoral (Ph.D.) degrees in agricultural economics and, jointly with the College of Business Administration, a master of business administration (MBA) degree in agribusiness. Currently, about 30 students are enrolled in these programs. In addition to course work, students are involved in research projects, many of which lead to presentations at professional meetings and, in some cases, published articles in professional journals. Graduate student presentations at professional meetings provide a valuable experience to the student and increases the visibility of the department. Over the past five years, students have made 66 presentations to professional audiences, an average of about 13 a year. Most of the papers have been presented at prestigious meetings at which the selection of papers to be delivered is highly competitive. Many agricultural economics graduate students also actively participate in seminars and workshops organized by the Center for Agri-Food Industrial Organization, a virtual center that has been established by faculty in the department (<http://agecon.unl.edu/cafoio/homepage.html>). The success of these students in conducting peer-reviewed research and presenting their results to professional audiences indicates the strength of these programs and the quality of the students we have been able to recruit.

E. Wesley Peterson

For more information, e-mail Wes Peterson, epeterson1@unl.edu, or phone (402) 472-7871.

Simulations Bring Realistic Trading To Ag Marketing Class

Students taking AECN 325, "Marketing of Agricultural Commodities," learn about marketing concepts and tools through books and typical classroom lectures and discussions. But, because most students learn best through hands-on applications, it doesn't stop there. To complement the material covered in the course, simulations based on real-life markets are used throughout the course. The simulations motivate students to follow current market prices and determine how fundamental supply and demand conditions influence prices for commodities like corn, soybeans, wheat, cattle, and hogs. It also provides them with knowledge of market mechanics—how to establish or offset positions in the futures market, when to buy or sell, how to manage margin accounts, etc. One simulation that runs throughout the course allows students to trade futures contracts on agricultural commodities, metals, and currencies. Although these futures contracts are hypothetical contracts, they are realistic in that their prices, margin requirements, and trading rules follow their real-life counterparts. Armed with \$25,000 of pretend money, each student invests in futures contracts with the goal to make the most money by the end of the class. Each student determines which contracts to trade, whether to buy or sell, and when to buy or sell. Because market conditions change constantly, students closely monitor their trading accounts each day. Generally, about half of the students make money and about half lose some or all of their initial endowment.

Another simulation used in AECN 325 is an open-outcry auction, which is how most futures contracts on agricultural commodities are traded. For the open-outcry auction simulation, students are divided into buyers, sellers, and speculators. They then are gathered together to negotiate trading prices based on the supply and demand conditions affecting the firm they represent. This exercise enables students to understand how the intersection of theoretical supply and demand curves is discovered in real-life markets to arrive at market prices. Demand and supply conditions are varied throughout the simulation to demonstrate determinants of price increases and decreases.

Other class projects and exercises in AECN 325 are based on students' own farming operations, which assists them in making their own marketing decisions. Future plans are to offer an additional simulation that models the cash fed cattle market. Students report that the marketing simulations are a "tremendous learning experience" as well as "a lot of fun."

Darrell R. Mark

For more information, e-mail Darrell Mark, dmark2@unl.edu, or phone (402) 472-1796.

Focus on outreach

Fall 2003 Livestock and Grain Price Outlook Meetings

Marketing decisions are increasingly critical to earning a profit from grain and livestock production. With a host of marketing and risk management alternatives available and ever-changing fundamental supply and demand conditions, farmers and ranchers need to evaluate how various marketing tools and decisions will perform given current and expected prices. In September, a series of Livestock and Grain Price Outlook Meetings were held throughout Nebraska to update producers and agribusiness managers on current and projected supply and demand conditions that were expected to affect prices and marketing decisions for the new crop year. Discussions were also held on marketing issues expected to affect livestock producers and how to manage new risks associated with labeling, traceability, and world trade concerns. The Outlook Meetings were sponsored by University of Nebraska Cooperative Extension.

Darrell R. Mark

For more information, e-mail Darrell Mark, dmark2@unl.edu, phone (402) 472-1796; Lynn Lutgen, llutgen1@unl.edu, (402) 472-3406; or Dillon Feuz, dfeuz1@unl.edu, (308) 632-1232.

Country of Origin Labeling

Livestock producers across Nebraska and the entire country are beginning to learn how Country of Origin Labeling (COOL) will affect their operations. COOL, which was enacted as part of the 2002 Farm Bill, requires that retailers inform consumers of the country of origin of beef, pork, and lamb muscle cuts and ground cuts. In order for retailers to have information about where the livestock that produced the meat were born, raised, and processed, livestock producers will have to provide this information to retailers. This will likely require additional record keeping and assuring purchasers of livestock or meat products that records exist that document the origin of the products covered by COOL. Currently, COOL is being conducted on a voluntary basis; however, it will become mandatory on September 30, 2004. To assist livestock producers in complying with the mandatory COOL regulations once they are available, University of Nebraska Cooperative Extension continues to offer resources to aid in understanding the COOL regulation and the impacts it may have on the livestock and meat industries. These resources have included Cooperative Extension publications, *Market Journal* and *Market Journal Extra* news stories, and presentations. These resources are all available at Cooperative Extension's COOL Web site by logging onto <http://>

agecon.unl.edu/mark/cool. As more details about how to enact COOL become available, they are added to the COOL Web site. When the mandatory COOL regulations are finalized, a series of workshops will be conducted to assist producers with COOL implementation on their farms and ranches.

Darrell R. Mark

For more information, e-mail Darrell Mark, dmark2@unl.edu, (402) 472-1796; or Dillon Feuz, dfeuz1@unl.edu, (308) 632-1232.

Risk Management for Small and Beginning Farmers/Ranchers

A series of risk management education workshops targeting small and beginning farmers/ranchers was presented in February 2003. Dave Goeller, transition specialist from the University of Nebraska, and Joy Johnson and Wyatt Fraas, representatives from the Center for Rural Affairs cooperated in a joint effort to present risk management tools and strategies to Nebraska producers. Programs were held at five regional sites throughout the state. Educational objectives included a working demonstration of production and price risk management tools as well as strategies to assess risk tolerance and create higher profit enterprises. Information regarding seasonal price trends, sustainable enterprises and production efficiency helped demonstrate opportunities and alternatives with special emphasis given to small and beginning farmers/ranchers. A grant from the USDA Risk Management Agency helped sponsor the workshops.

A follow-up series of meetings for 2004 are being planned.

For information e-mail Dave Goeller, dgoeller@unl.edu, or phone (402) 472-0661.

New Program Builds LeadershipPlenty

"We sure do need some new faces on the church council."

"Looks like Gary is a shoo-in for the village board again — no one is running against him."

At coffee shops all across rural Nebraska you hear these comments. Nebraskans lament the fact that people are not willing to fill traditional leadership positions in the community.

Leadership may seem like the problem. Instead, it is an evolving and crucial need that shifts and changes as commu-



Participants from the University included: Dennis Kahl, extension educator, Seward County; Kim Bearnes, extension educator, Thurston County; Cheryl Burkhart-Kriesel, extension community development specialist and Agricultural Economics faculty member; Carroll Welte, extension educator, Burt County; Phyllis Schoenholz, extension educator, Nuckolls/Thayer Counties; and Anita Hall, extension educator, Antelope County.

nities change. It is common to think that communities have just a handful of leaders. The good news is that we live in communities of leadership plenty — plenty of people with untapped talents to make their communities better places to live, work, and raise families.

This reality is the basic concept behind the program *LeadershipPlenty*. Designed as a multi-session educational curriculum by the national Pew Center for Civic Change, it is structured to teach essential skills for community problem solving such as identifying community assets, managing conflict, planning for action and measuring results.

Cheryl Burkhart-Kriesel, extension community development specialist, teamed with a group of extension educators from across the state, to submit an application to the Pew Center. “We feel very fortunate to be one of 15 organizations out of over 70 applications nationally this year to have been selected,” said Burkhart-Kriesel.

As part of the application process the group identified six locations in the state where the material will be initially used during the fall and winter of 2003-04. “Several communities are wanting to come together, sometimes across county lines, to form new community development organizations — this is

very positive!” according to Burkhart-Kriesel. After the initial launch of the program, it will be made available across the state.

In May the group attended a three-day training in Colorado Springs, Colo., which allowed them to access the resource materials and evaluation tools and network nationally with other groups using the program. University faculty that participated included: Anita Hall, extension educator, Antelope County; Dennis Kahl, extension educator, Seward County; Kim Bearnes, extension educator, Thurston County; Carroll Welte, extension educator Burt County; Phyllis Schoenholz, extension educator, Nuckolls/Thayer Counties; and Cheryl Burkhart-Kriesel, extension community development specialist and agricultural economics faculty member.

For more information, e-mail Cheryl Burkhart-Kriesel, cburkhartkriesel1@unl.edu, or phone the Panhandle Research Extension Center in Scottsbluff at (308) 632-1234.

Focus on alumni

DR. WILLIAM (BILL) G. TOMEK

Dr. Bill Tomek is a Nebraska native who has contributed greatly to students and to the profession we call agricultural economics. Born on a farm near Table Rock, he graduated with a bachelor of science degree in agricultural economics from UNL in 1956. Former department head and dean for the College of Agriculture, Howard Ottoson was his adviser. Dr.



Dr. William (Bill) G. Tomek

Tomek obtained a master's of arts degree in agricultural economics from UNL in 1957 and a doctorate in agricultural economics in 1961 from the University of Minnesota.

Dr. Tomek joined the faculty at Cornell University in 1961 and provided leadership for teaching and research in price analysis and applied econometrics. He has published articles in at least nine different journals. In addition, he is the co-author of a textbook used in many classrooms, *Agricultural Product Prices*, which is in its 4th edition. He served his fellow faculty members at Cornell as chairman of the Department of Agricultural Economics from 1988 to 1993. He also served the profession as president of the American Agricultural Economics Association (AAEA) in 1986 and was member of the executive board of the AAEA, 1984-1987. He was editor of the *American Journal of Agricultural Economics (AJAE)* 1975-1977. He has also been a co-editor for Research Symposia Proceedings of the Chicago Board of Trade. Dr. Tomek has chaired or co-chaired committees for 17 doctoral and 21 master's students who have completed their degrees.

Dr. Tomek has been recognized by his peers in many ways, culminating in election to Fellow of the American Agricultural Economics Association in 1989, an honor bestowed on only 166 members going back to 1957! He has twice received the award from the AAEA for a publication of "enduring" quality, once for an article (1989) and once for a book (1997). His article, "Price Behavior On a Declining Terminal Market," published in the *AJAE* in 1980 was awarded the outstanding journal article in 1981. He was Master Alumnus, UNL, 1976 and received the Distinguished Alumni Award from the Department of Applied Economics, University of Minnesota 1985-1986. He has received other, numerous honors. He continues to support the department at UNL with an endowed grant for faculty and students.

Dr. Tomek retired from Cornell in 2000. He is a Professor Emeritus and continues to be active in the profession and as a volunteer. He is president of the senior section of the AAEA, teaches a class for graduate students and directs two graduate students. In addition, he is a lay leader in his church in Ithaca, N.Y., and serves in other volunteer capacities related to the church.

JEFF PRIBBENO

Jeff Pribbeno was born and raised in Chase County, Neb., and he received a Bachelor of Science degree in agricultural economics from the University of Nebraska in 1976.

Jeff is president of Wine Glass, Inc., a company that operates and manages the 115-year-old family-owned farm and ranch operation in Chase County.

There are 15,000 acres of pasture that support 1,000 cows in a commercial cow/calf operation and 3,000 steers and heifers in a yearling stocker and custom grazing/backgrounding operation. There are also 6,000 acres of farmland producing wheat, corn, and sunflowers. He is also part owner and chief financial officer for Imperial Beef, a 32,000 head commercial cattle feedyard in Chase County.

Jeff has been a member of National Cattlemen's Beef Association since 1978 and has served on the Foreign Trade Committee for many years. He was selected as the 1986 Nebraska delegate to the Young Cattlemen's Leadership Conference and was appointed 1987 National Young Cattlemen's Leadership Conference Chairman. He is a member of Society of Range Management, Nebraska Wheat Growers Association, and Sandhills Cattle Association. He was selected to participate in the ninth group of the Nebraska LEAD program in 1989.

Jeff has been active in Nebraska Cattlemen's Association since 1977. He has served on the board of directors, headed various committees and served as associate president in 1995-1996. He also served as president of the Nebraska Cattlemen's Research and Education Foundation in 1991-1992.

Jeff is married to Connie, an elementary school teacher in Imperial, and they have two sons, Logan 19 and Max 16.



Jeff Pribbeno

Focus on people

Students

Kyle Arganbright, a senior this fall in agribusiness from Valentine was elected to the Innocents Society honorary. Kyle was also elected UNL student body president in the 2003 spring election. As ASUN president, Arganbright will also serve as the 2003-04 UNL student Regent.

Chris Gustafson, a December 2002 graduate in agricultural economics/public policy with a minor in international agriculture and natural resources from Mead was awarded a Fulbright scholarship to study in Italy.

Lisa Pfeiffer's paper "Agricultural Productivity Growth in the Andean Community" won first place at the American Agricultural Economics Association's undergraduate student paper competition in Montreal. This paper will be published in the December 2003 issue of the *American Journal of Agricultural Economics*. Lisa's advisor is Lilyan Fulginiti. Pfeiffer will begin graduate studies this fall in agricultural economics at the University of California-Davis.

Two students were awarded ARD undergraduate honors research grants. The research topic for Laurel senior agribusiness student Rik Smith is "An Evaluation of Labor Costs of Nebraska Feedlots." Smith's mentors are Darrell Mark and Dick Clark. The research topic for Ideal, S.D. senior agricultural economics student Trent Blare is "WTO Trade Negotiations: Implications of a New Agreement on Agriculture for US Grain and Oilseed Producers." Blare's mentor is Wes Peterson.

The department's National Agribusiness Marketing Association chapter attended meetings in San Diego, Calif., in April to participate in the marketing competition. The chapter received a top 10 finish (out of 36 chapters) for their annual report, which is used as the basis for the outstanding chapter competition. The presentation team consisted of Kim Becker, Katie Frey, Eric Lemke and Gibson Nene. Rachel Janousek, editor of the report, also received a \$2,000 scholarship from NAMA's foundation. Janousek finished in the top four out of hundreds of the nation's best students.

Faculty and Staff

Two staff members have received IANR outstanding employee awards. Belva Harris, accounting clerk III with the Filley Hall Business Center, received the OEA for Office/Service staff in March 2003. Rebecca Vogt, survey manager for the Center of Applied Rural Innovation, received the OEA for Managerial/Professional staff for July-August, 2003.

John Allen received the 2003 Excellence in Extension/Public Service Rural Sociological Award for 2003 from the Rural Sociological Society.

Ron Hanson received the College of Agricultural Sciences and Natural Resources 2003 Superior Academic Advising Award.

The Cow-Calf and Forage Systems in the Nebraska Sandhills team received an IANR team award. Departmental members on this multi disciplinary team include Dick Clark, Dillon Feuz and Glenn Helmers.

Lynn Lutgen assumed the role of Director of the Nebraska Cooperative Development Center on July 15, 2003. Lynn has been heavily involved with cooperative development, particularly overseas in Russia and the Ukraine, where he participated in USDA'S Commercial Agriculture Development Project. Lynn has worked with the NCDC the last couple of years assisting cooperative groups with their business plan and feasibility study development, and he has been a trainer for the NCDC First Responder network. The NCDC provides educational and technical assistance to value-added startup enterprises.

Konstantinos Giannakas received tenure and promotion to the rank of associate professor effective August 18, 2003.

In August 2003, departmental employees were recognized for their years of service to the University, including Lynn Lutgen (30 years), George Pfeiffer (25 years), Nancy Pritchett (15 years) and Dennis Conley (15 years).



Belva Harris



Rebecca Vogt



Lynn Lutgen

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